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FOREIGN ANIMAL
DISEASES REPORT



JANUARY -
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UNITED STATES DECLARED HOG CHOLERA FREE

On January 31, 1978, Secretary of Agriculture Bob Bergland officially declared the United States free of hog cholera, the most destructive and costly swine disease ever to exist in this country.

In signing a document which lifts a 1972 declaration of emergency and also recognizes the Nation's "hog cholera free" status, the Secretary called eradication of this virus disease "one of the most significant achievements in animal health history."

Secretary Bergland noted, however, that hog cholera still exists in many countries of the world. "Just as with foot-and-mouth disease or African swine fever or any other foreign animal disease, farmers, veterinarians, and regulatory officials must be alert for introductions of hog cholera." The U.S. Department of Agriculture (USDA) is prepared to contain and eliminate such outbreaks. If the disease is introduced, the sooner it is detected, the quicker it can be eradicated.

Secretary Bergland pointed out that the eradication of hog cholera ranks as a highly significant accomplishment for several reasons. "This is a tax-supported program that was started and finished--and it was completed at less cost than originally estimated."

"The eradication of this disease took just about 15 years--a relatively short time for disease elimination" he said. "But even more important, the job was done for less than the original estimate. At the outset, eradication was expected to cost between \$160 and \$200 million in State and Federal funds. The actual cost from 1962 through 1977 was about \$140 million."

First reported in Ohio and Indiana in the early 1830's, hog cholera spread throughout the country and the world, killing more swine than any infectious disease yet known. The eradication program, carried out by USDA's Animal and Plant Health Inspection Service (APHIS) and the States, was authorized by Congress in late 1961, and got underway a year later.

"This program is an excellent example of what can be accomplished through the cooperative efforts of the State and Federal governments and--most importantly--the swine industry," Secretary Bergland said. Before the eradication campaign began, hog cholera was costing U.S. hog producers some \$50 million a year--\$10 million in death losses and \$40 million in preventive vaccination costs. An estimated 5,000 to 6,000 swine herds were struck annually.

"If there had been no campaign and those factors had continued at the same rate, those costs would have doubled--to roughly \$100 million a year in 1978 dollars," Secretary Bergland said.

Eradication of hog cholera will also bring a boost for U.S. balance of payments, according to the Secretary. It is anticipated that the hog cholera free status will increase pork exports to the amount of \$10 million annually.

"Traditionally, increased production and processing costs are passed along to the consumer in the form of higher prices. Thus, even though direct benefits from eradication go to producers, consumers also gain from the eradication of this costly killer due to decreased production costs," Secretary Bergland said.

Key points in the eradication campaign were elimination of vaccines in 1969, development of a "task force" approach to disease outbreaks in 1970, and declaration of a "national emergency" in 1972. The program consisted of four phases to allow individual States to progress toward the eradication goal at different rates of speed.

The first two phases emphasized control measures--to reduce the incidence of the disease so that the "stamping out" actions of the next two phases could be economically applied. Phases III and IV involved destruction of infected and exposed swine herds with payment of indemnities to help compensate producers for their losses. All told, some 5,700 swine herds containing about 800,000 hogs were destroyed because of hog cholera from 1965 through 1976, at a total cost of \$25 million. The last case occurred on August 1, 1976, in a swine herd near Cape May, New Jersey.

STATUS OF THE STATE-FEDERAL HOG CHOLERA ERADICATION PROGRAM (FY '77)

Surveillance Activities - FY 1977: The former task force headquarters at Bellmawr, New Jersey, was maintained and staffed through FY 1977. This has been the focal point of operations for permanent and temporary personnel assigned to New Jersey. Investigations and laboratory examination of tissues and serological samples from the New Jersey area have not indicated hog cholera virus activity.

Hog cholera activities in the New England six-State area continued as a separate activity of the Waltham, Massachusetts, area office under the direct supervision of the Assistant Area Veterinarian in Charge and State officials. The level of inspection of waste food feeders continued at twice per month through FY 1977 and will be reduced to once per month in FY 1978. Field temporary personnel were reduced as time and funding indicated that it was safe to do so. Efforts at market swine identification continued through FY 1977 with a high level of serological sample collections at a large swine slaughtering operation in Philadelphia. The modified embargo imposed September 13, 1976, on the importation of swine into the Commonwealth of Pennsylvania from Massachusetts was

revoked effective August 29, 1977. All classes of swine may now be imported through all market channels. Previous to this, all swine moved only to slaughter through the swine slaughtering operations in Philadelphia. Slaughter sample collections of serum at the Pennsylvania Packing Company ceased as a regular activity at this plant. Serological monitoring expanded through the year in Connecticut, Vermont, New Hampshire, and Massachusetts slaughter plants as was also true in New Jersey slaughter plants. Sick calls and other farm investigations continued through the year by trained hog cholera diagnosticians.

Developments in FY 1977: Irradiated hog cholera fluorescent antibody check test material has been issued to diagnostic laboratories capable of conducting this important screening and investigation technique.

A meeting of the Agricultural Research Service scientists was held on July 7, 1977, to propose research efforts for developing improved methods of waste food processing. From this meeting, efforts are in motion to pursue the use of microwave on international garbage and the effectiveness of fermentation as an alternative to heat processing of edible waste food.

In conjunction with two national slaughter serum surveys (3 months in FY 1977 and 12 months in FY 1978) for information on the prevalence and incidence of pseudorabies exposure, hog cholera serological testing will also be conducted. Testing and tabulation have not been completed on these due to the overload of serologies from the New England area in FY 1977.

Continued stimulation will be necessary by State and Federal animal health officials in the search for hog cholera should it be reintroduced from outside the United States. Time and other activities will be the enemy of surveillance activities planned at normal or near normal program levels through FY 1979.

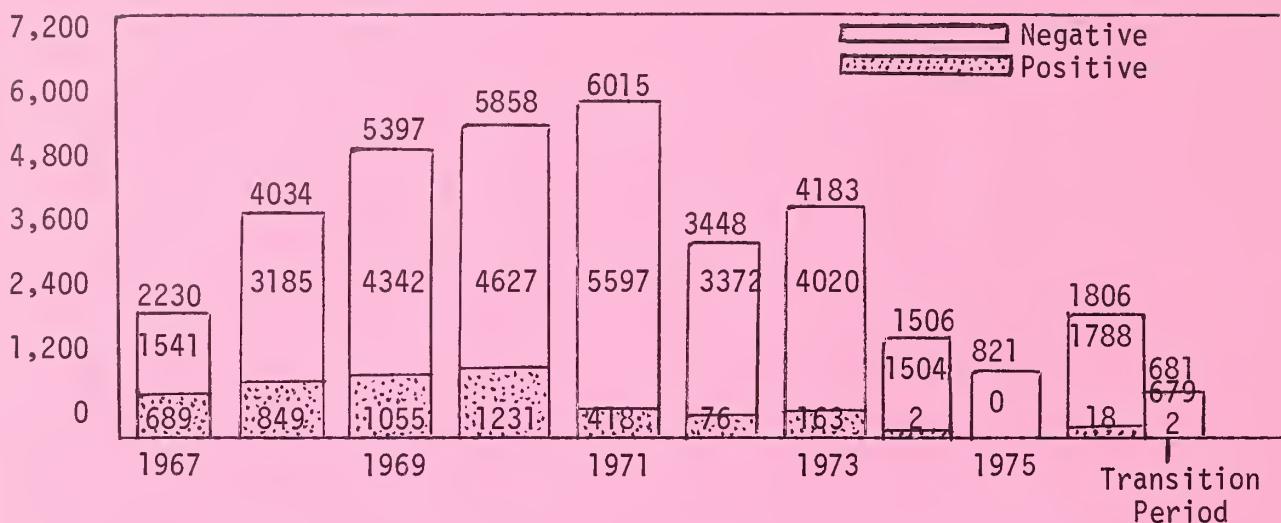
Screening at diagnostic laboratories with reference assistance from National Veterinary Services Laboratories, sick swine investigations, and tissue and serum submissions have been and will continue to be an important facet of surveillance nationally with high levels of activity in former task force areas of New England, New Jersey, and Texas. Market inspections and interstate movements continue to monitor swine health.

SUMMARY OF SURVEILLANCE - FISCAL YEAR 1977

	<u>Herds</u>	<u>Swine</u>
On Farm Inspections	147,456	7,568,925
Market Inspections	505,777	13,039,245
Laboratory Screening		
Fluorescent Antibody (FA) Tests	6,087	29,860
Serum Neutralization (SN) Tests	2,811	42,269

HOG CHOLERA CASES REPORTED
By Fiscal Year

Number Cases



EMERGENCY DISEASE ACTIVITIES

During FY 1977 (October 1, 1976-September 30, 1977), five Regional Emergency Animal Disease Eradication Organizations (READEO's) were fully staffed and maintained to rapidly respond to outbreaks of emergency diseases. A program was continued to increase the proficiency of READEO members, thereby improving the ability to react to exotic diseases.

The Western READEO responded to exotic Newcastle disease outbreaks in pet birds twice during the fiscal year. The first outbreak was in the San Diego area of Southern California, and the second outbreak involved commercial aviaries at Bakersfield, California, and Kaneohe, Oahu, Hawaii.

The Northern READEO was activated in response to an outbreak of exotic Newcastle disease in Virginia.

In all three instances, rapid action prevented any spread into commercial poultry flocks and resulted in rapid and effective elimination of the outbreaks.

During FY 1977, foreign animal disease surveillance activities resulted in 51 investigations of disease situations reported to be suspicious of exotic diseases. All were negative for foot-and-mouth disease and other exotic diseases.

One 2-year old angus bull at Gresham, Marion County, South Carolina, was serologically positive for New Jersey vesicular stomatitis on both acute and convalescent samples indicating a previous infection.

Three Foreign Animal Diseases Training Courses were conducted for 36 field veterinarians. This brings the total of foreign animal disease diagnosticians available to conduct investigations of suspicious reports to 198.

Training seminars were conducted for the Field Operations Officers of the five READEO's for foreign animal disease diagnosticians and for appraisers who may be involved in identifying and appraising exotic caged birds in the event of an outbreak.

A training course was developed and conducted by the Military Liaison Officer. Ten military veterinarians were trained in exotic diseases and procedures used in the eradication of such diseases. In addition, the Military Liaison Officer participated in training activities at five military installations.

Four Foreign Animal Disease Awareness Seminars were conducted at colleges of veterinary medicine. These seminars were held in Alabama, New York, Ohio, and Michigan and were designed to inform students of veterinary medicine, veterinary faculty members, practicing veterinarians, and animal health officials of the threat of these diseases to this country's livestock, poultry, and wildlife populations and the necessity for the prompt reporting of suspicious cases.

The nine exotic diseases training films being prepared by Emergency Programs of the Animal and Plant Health Inspection Service and the Plum Island Animal Disease Center received a concentrated effort. The first film, swine vesicular disease, was completed and distributed in August 1976. The second film, foot-and-mouth disease, was released in October of 1977. The third film, African swine fever-hog cholera, is in the final stage and is scheduled to be distributed in January of 1978. The remaining six films--rinderpest, African horse sickness, contagious bovine pleuropneumonia, viscerotropic velogenic Newcastle disease-fowl plague, malignant catarrhal fever, and sheep pox-goat pox--are in the planning and developmental stages. These films will be in both English and Spanish.

By the end of FY 1977, 18,000 articles covering 14 diseases had been cross-indexed, coded, and placed in the Emergency Programs Information Center (EPIC) Data Bank in a rapidly retrievable form, for use in preparing for emergencies.

Memorandums of Understanding were established with 13 State or university laboratories for support in the event of an animal disease emergency. These laboratories will make their personnel and facilities available for emergency disease operations.

During FY 1977, a temporary 10-month post was established in Australia to study the epidemiology of ephemeral fever. The knowledge and the ability to train others obtained will serve as a valuable resource for emergency activities should this disease, which is exotic to the United States, penetrate our protective barriers.

A cooperative agreement was signed with Guatemala for the prevention, control, and eradication of foot-and-mouth disease. Such agreements have not been consummated with all Latin American countries extending from Mexico to, and including Colombia.

During FY 1977, the Mexican-U.S. Commission for the Prevention of Foot-and-Mouth Disease Vesicular Laboratory at Palo Alto was remodeled to reinforce security and improve the technical facilities.

FAO SECOND EXPERT CONSULTATION ON RESEARCH ON TICK-BORNE DISEASES AND THEIR VECTORS

From December 12-16, 1977, the Food and Agriculture Organization (FAO) of the United Nations held the Second Expert Consultation on Research on Tick-Borne Diseases and Their Vectors at their headquarters in Rome, Italy. The expert consultants represented institutions in 19 countries throughout the world. The U.S. Department of Agriculture participated with representatives from Agricultural Research Service and Animal and Plant Health Inspection Service.

The expert consultation gave major consideration to such topics as the epizootiology of tick-borne diseases, treatment of tick-borne diseases, immunity and immunization, biology and population dynamics of vector species, vector control, acaricide resistance, information dissemination, and the economics of ticks and tick-borne diseases.

The expert consultation reemphasized the importance of ticks and tick-borne diseases to animal production and health on a global basis and provided recommendations for action by FAO and the scientific community at large. Copies of the report of the Second Expert Consultation on Research on Tick-Borne Diseases and Their Vectors should be available in early 1978 from the Food and Agriculture Organization headquarters in Rome.

NEW ZEALAND HOSTS 11th OIE REGIONAL CONFERENCE ON EPIZOOTICS IN ASIA, THE FAR EAST, AND OCEANIA

The United States is a member of two of the four Regional Commissions of the Office of International Epizootics (OIE): that for the Americas; and, because of Hawaii, Guam, and the Pacific Trust Territories, that for Asia, the Far East, and Oceania. The Eleventh Regional Conference on Epizootics in Asia, the Far East, and Oceania, held in Rotorua, New Zealand, September 26-October 2, 1977, was the first the United States attended as a member. Sixty participants from member and observer nations and international organizations attended.

Several countries of this vast region, with its variable contagious disease situation, are major trading partners of the United States for meat, other animal products, and breeding stock. There were 35 presentations on, and discussions of, six animal health topics: mastitis control, hemorrhagic septicemia, fascioliasis, foot-and-mouth disease, Newcastle disease, and the significance of animal products in the spread of disease. The U.S. delegation presented papers on the latter three topics.

With increasing investment of their veterinary service resources, most of the FMD-infected countries of the Region have seen gradual improvement in the control of this disease. In addition to the United States, at least two other major FMD-free countries of the Region--Australia and Japan--have subsidized foreign programs in an effort to keep the disease from their shores.

Virulent forms of Newcastle disease occur throughout most countries of the Region. The Far East is a major source of pet birds exported to the United States. Resolutions on this disease included ways of strengthening control programs in infected countries and of prevention for those fortunate ones presently free of the disease.

The host country for this conference, New Zealand, has special reason to be interested in the prevention of exotic diseases. Agriculture, primarily live-stock products, provides between 70 and 80 percent of its export income, and its freedom from most contagious livestock diseases is an important factor in this trade.

FOOT-AND-MOUTH DISEASE IN CHILE

On December 6, 1977, Chile declared the following provinces south of Santiago free from foot-and-mouth disease: Valdivia, Osorno, Llanquihue, and Chiloe Insular. No clinical disease has been reported since 1970 and vaccination has been prohibited for 6 months.

WORLD DISEASE REPORTS*

Country	Date 1977	New Outbreaks	Country	Date 1977	New Outbreaks
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Foot-and-Mouth Disease

Argentina	Feb. 16-April 30	120	Kenya	July	2
Brazil	June 18-July 29	1,232	South Africa	July-August	2
Burundi	May-June	2	Spain	May-June	4
Cameroon	May June	10	Tanzania	May-July	6
Chile	July-September	3	Thailand	April-June	29
Colombia	July-August	66	Turkey	July-August	130
Ecuador	June-August	25	Uruguay	July-August	54
Hong Kong	August-September	1	U.S.S.R.	June-July	24
Iran	July-August	17	Venezuela	July	4
Iraq	Aug. 16-Sept. 15	2			

Contagious Bovine Pleuropneumonia

Cameroon	May-June	1	Niger	May-July	5
Ghana	May-July	20	Nigeria	July	1
Ivory Coast	February-July	12			

Dourine

South Africa	July-August	7
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Lumpy Skin Disease

Botswana	May-August	21	South Africa	July-August	4
Congo	May-June	1	Swaziland	July-August	1
Ivory Coast	January-July	3			

Sheep Pox

Iran	July-August	9	Kuwait	September	45**
Iraq	Aug. 16-Sept. 30	30	Turkey	July	38
Israel	August	1			

African Swine Fever

Portugal	August	475	Spain	June 15-Sept. 15	153
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Swine Vesicular Disease

Italy	Aug. 16-Sept. 30	15
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(*Extracted from International Office of Epizootics, Monthly Circular, numbers 369 and 370).
(**Cases).